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(54) Title: METHOD OF PLASTID TRANSFORMATION IN ASTERACEAE, VECTOR FOR USE THEREIN AND PLANTS THUS OBTAINED

(57) Abstract: The present invention relates to a method for the transformation of plastid genomes of plant species, in particular *Asteraceae* plant species, comprising the steps of providing a transformation vector carrying a DNA sequence of interest; subjecting a plant material, which comprises plastids, to a transformation treatment in order to allow the plastids to receive the transformation vector; placing the thus treated plant material for a period of time into contact with a culture medium without selection agent; subsequently placing the plant material into contact with a culture medium comprising a selection agent; and refreshing the culture medium comprising a selection agent to allow plant material comprising plastids that have acquired the DNA of interest to grow into transformants.

WO 2004/016793 A2